

Applicants: Heung Nam HAN et al.
Serial No.: 10/717,334
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Amendments to the Claims:

Please amend claims 1 and 5 and cancel claims 2 and 3 to read as follows:

1. (Currently Amended) A friction sheet welding method for joining two work pieces comprising the steps of:

a) firmly butting the two work pieces so that their joining surfaces face each other;

b) positioning a cylindrical rod shaped no-pin probe, which has a diameter twice as much or greater than the thickness of the work pieces, and which is made of material harder than the work piece material, on a weld joint line between the work pieces so as come into contact with the work pieces;

c) producing forcible and intense plastic deformation at surfaces of the work pieces while generating frictional heat at the surfaces by rotating the probe at a high speed;

d) joining the work pieces together as the plastic deformation produced at the surfaces of the work pieces permeates inside material constituting the work pieces; and

e) continuously welding the work pieces by traversing the probe in a horizontal direction along the weld joint line.

2. (Canceled)

3. (Canceled)

4. (Original) The method as set forth in claim 1, wherein the probe has a plurality of protrusions at its lower end surface in order to increase a coefficient of friction thereof.

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5. (Currently Amended) The method as set forth in claim 1,
wherein the work pieces are made of ~~the same or~~ different
materials.